FIG.1

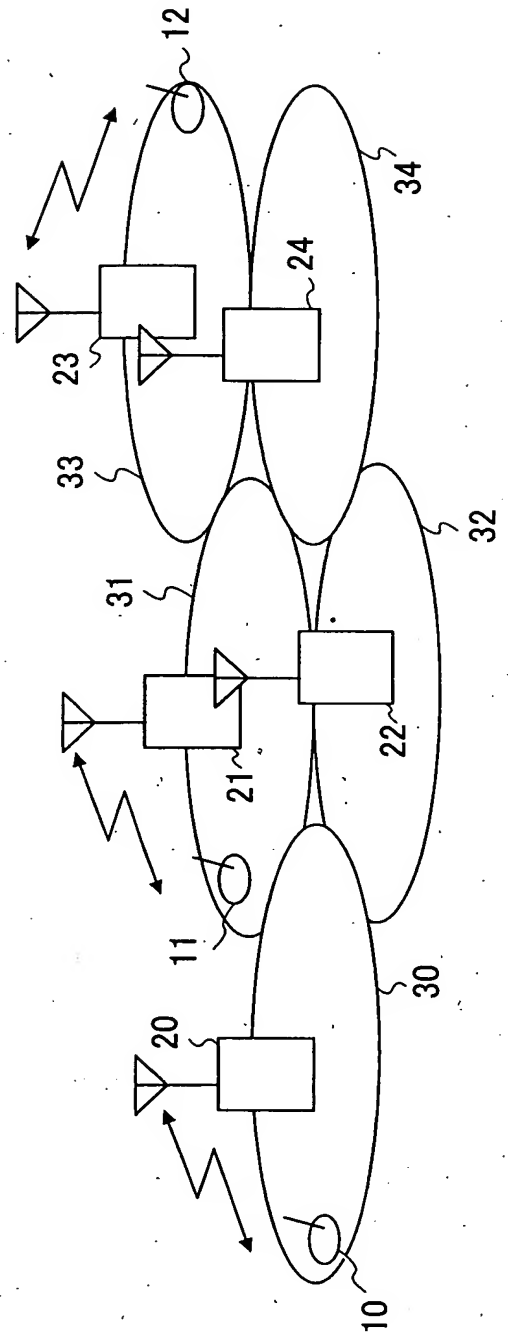

FIG.2

	DEFINITION	CCPCH
(a) MAXIMUM TOTAL TRANSMISSION POWER OF BASE STATION (dBm)		42.00
(b) TRANSMISSION POWER OF DESIGN TARGET CHANNEL (dBm)		36.00
(b1) POWER RATIO OF DESIGN TARGET CHANNEL (%)	$10^{(b)/10}/10^{(a)/10}\times 100$	25.12
(c) TRANSMITTER FEEDER LOSS (dB)		3.00
(d) TRANSMITTER ANTENNA GAIN (dB)		17.00
(e) EFFECTIVE TOTAL RADIATION POWER (dBm)	(a)−(c)+(d)	56.00
(f) EFFECTIVE RADIATION POWER OF DESIGN TARGET CHANNEL (dBm)	(b)−(c)+(d)	50.00
(g) RECEIVER ANTENNA GAIN (dB)		0.00
(h) RECEIVER FEEDER LOSS (dB)		0.00
(i) THERMAL NOISE POWER DENSITY (dBm/Hz)		−174.00
(j) RECEIVER NOISE FIGURE NF (dB)		5.00
(k) SYMBOL RATE (ksps)		15.00
(l) SYMBOL RATE (dBHz)	10*LOG((k)*1000)	41.76
(m) THERMAL NOISE POWER (dBm)	(i)+(j)+(l)	−127.24
(n) CHIP RATE (Mcps)		3.84
(o) COEFFICIENT OF INTERFERENCE FROM OTHER CELLS (dB)		8.00
(p) REQUIRED SIGNAL TO INTERFERENCE POWER Λ (dB)		7.00
(q) ORTHOGONALITY COEFFICIENT		0.50
(r) REQUIRED RECEIVING POWER (dBm)	$\dfrac{10^{(p)/10}\cdot 10^{(m)/10}}{1-\dfrac{(k)\cdot 10^{3}\cdot 10^{(p)/10}}{(n)\cdot 10^{6}\cdot (b1)/100}\cdot\left((q)+10^{(o)/10}\right)}$	−116.95
(s) DHO GAIN (dB)		0.00
(t) SHADOWING MARGIN (dB)		5.30
(u) FLUCTUATION MARGIN OF HIGH-SPEED TRANSMISSION POWER CONTROL (dB)		0.00
(v) BUILDING PENETRATION LOSS (dB)		6.00
(w) A ANTENNA BEAM TILT COMPENSATION (dB)		0.00
(x) ALLOWABLE PROPAGATION LOSS (dB)	(f)−(r)+(g)−(h)+(s)−(t)−(u)−(v)	155.65
(y) RANGE (km)	ACCORDING TO REFERENCE 3,ETC.	4.12

FIG.3

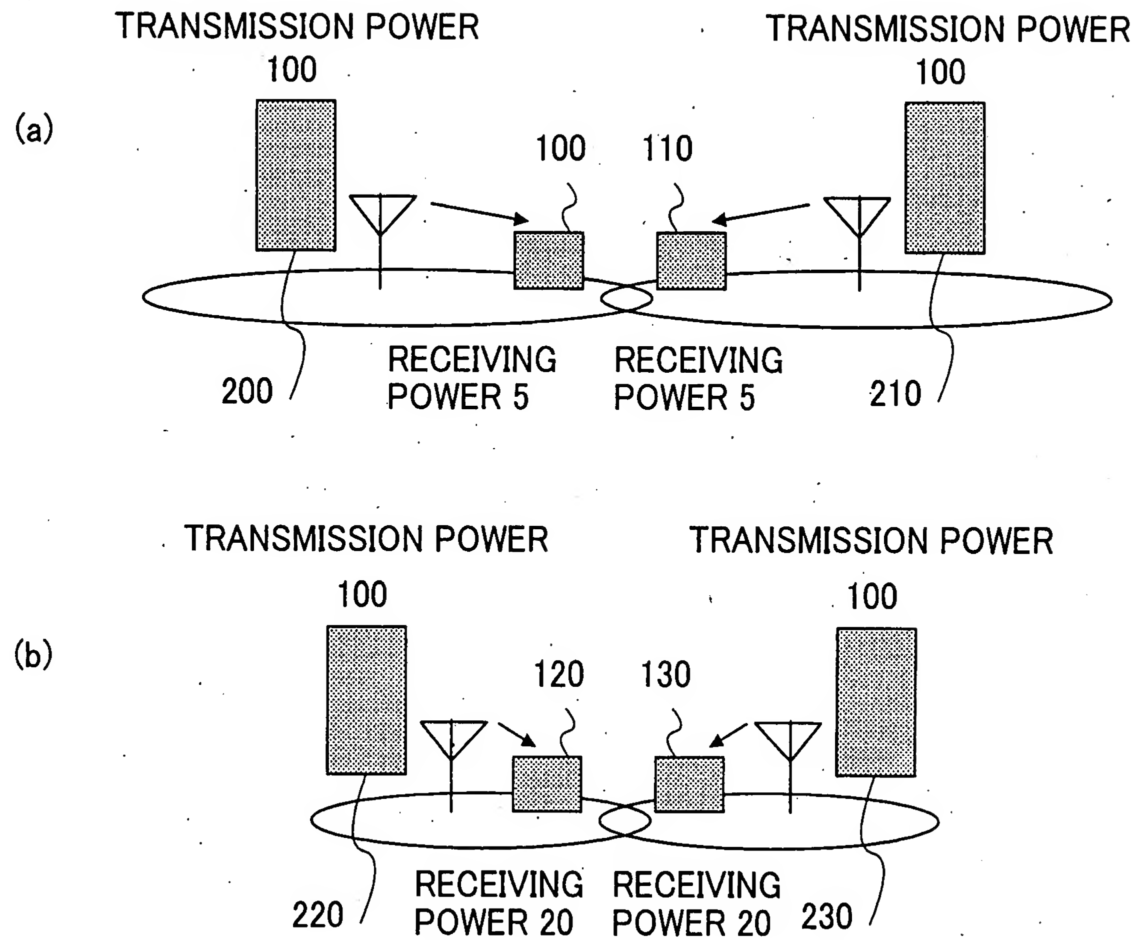
(a)
TRANSMISSION POWER
100
TRANSMISSION POWER
100
100
110
200
RECEIVING
POWER 5
RECEIVING
POWER 5
210
(b)
TRANSMISSION POWER
100
TRANSMISSION POWER
100
120
130
220
RECEIVING
POWER 20
RECEIVING
POWER 20
230

FIG.4

	①	②	③
SERVICE	12.2k-Speech	64kbps	384kbps
(a) MAXIMUM TOTAL TRANSMISSION POWER OF BASE STATION (dBm)	21.00	24.00	-24.00
(b) TRANSMISSION FEEDER LOSS (dB)	0.00	0.00	0.00
(c) TRANSMITTER ANTENA GAIN (dBi)	0.00	0.00	0.00
(d) TRANSMISSION EFFECTIVE RADIATION POWER=a-b+c (dBm)	21.00	24.00	24.00
(e) RECEIVER ANTENNA GAIN (dBi)	17.00	17.00	17.00
(f) RECEIVER FEEDER LOSS (dB)	1.00	1.00	1.00
(g) RECEIVER NOISE FACTOR NF (dB)	5.00	5.00	5.00
(h) THERMAL NOISE POWER DENSITY (dBm/Hz)	-174.00	-174.00	-174.00
(i) INTERFERENCE MARGIN (dB)	6.00	6.00	6.00
(j) TOTAL NOISE (INTERFERENCE + THERMAL NOISE) =g+h+i (dBm/Hz)	-163.00	-163.00	-163.00
(k1) INFORMATION SPEED (kbps)	12.20	64.00	384.00
(k2) INFORMATION SPEED (dBHz)	40.86	48.06	55.84
(l) REQUIRED Eb/(N0+I0) (Λ) (dB)	6.10	3.80	2.70
(m) REQUIRED RECEIVING POWER=j+k2+l (dB)	-116.04	-111.14	-104.46
(n) DHO GAIN (dB)	3.00	3.00	3.00
(o) SHADOWING MARGIN (dB)	5.30	5.30	5.30
(p) MARGIN OF HIGH-SPEED TRANSMISSION POWER CONTROL(dB)	2.00	2.00	2.00
(q) BUILDING PENETRATION LOSS (dB)	6.00	6.00	6.00
(r) ANTENNA BEAM TILT COMPENSATION (dB)	0.00	0.00	0.00
(s) ALLOWABLE PROPAGATION LOSS= d+e-f-m+n-o-p-q-s (dB)	142.74	140.84	134.16
(t) MAXIMUM REACHABLE RANGE (km) (CALCULATED BY REFERENCE 3,ETC.)	1.88	1.66	1.06